217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

United States Can Company
Attn: Alan Gans
1717 Gifford Road
Elgin, Illinois 60120

Application No.: 02100030
Applicant's Designation: C10 LINE
Subject: Coating Line (C-10)
Date Issued:
Location: 1717 Gifford Road, Elgin

I.D. No.: 031438AAN
Date Received: October 15, 2002

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a new coating line (C-10) with permanent total enclosure controlled by the existing regenerative thermal oxidizer (RTO) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1.0 Unit Specific Conditions

1.1 Unit: Coating Line
Control: RTO

1.1.1 Description

The line is composed of a sheet feeder, roll coater (housed within a total enclosure), gas fired curing oven, cooling zone, and sheet stacker. It uses various coatings and cleaners to produce coated metal sheets, which are then decorated, slit and formed into metal can components. The emissions from the total enclosure and coating oven exhaust will be vented to the plant’s existing RTO.

1.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
C-10	Coating Line and ancillary equipment	RTO

1.1.3 Applicability Provisions and Applicable Regulations

a. An “affected coating line” for the purpose of these unit specific conditions is the coating line described in Conditions 1.1.1 and 1.1.2.

b. The affected coating line is subject to limitations of 35 IAC 218.207(h)(2) for can coating, which provides that the coating line shall be equipped with a capture system and control device that provide 75 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency.

c. i. Clean-up operations performed on the affected coating line are subject to the following limitation of 35 IAC Part 218, Subpart G: Use of Organic Material:

> Emissions shall be controlled by the RTO so as to convert 85 percent of the hydrocarbons to carbon dioxide and water.

ii. These limits do not apply to solvents used as coating diluents (thinners) or double scraper solvent that are treated as an integral part of coating application and regulated by 35 IAC 218.207(h)(2) (see Condition 1.1.3(b)).

d. The affected coating line is subject to 35 IAC 212.321(a), which provides that the Permittee shall not cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

1.1.4 Non-Applicability of Regulations of Concern

a. Coating operations performed on the affected coating line and subject to limitations of 35 IAC 218.204 are excluded from requirements of 35 IAC Part 218, Subpart G: Use of Organic Material, pursuant to 35 IAC 218.209, Exemption From General Rule on Use of Organic Material.

b. The affected coating line is not subject to 40 CFR 60 Subpart WW “Standards of Performance for the Beverage Can Surface Coating Industry”, because no beverage can coating performed at this location.

c. Clean-up operations performed for the purpose of coating operations are not subject to 35 IAC 218,

Subpart TT: Other Emission Units, because the facility-wide Maximum Theoretical Emissions (MTE) from clean-up solvents used for coating operations are less than 100 tons/year.

d. This permit is issued based on the affected coating line not being a new or reconstructed major source of HAPs, so that the affected coating line is not subject to a case-by-case determination of Maximum Achievable Control Technology (MACT), pursuant to Section 112(g) of the Clean Air Act.

1.1.5 Operational and Production Limits and Work Practices

a. The RTO shall be in operation at all times that the associated emission unit(s) is in operation and emitting VOM. The afterburner shall not be seasonally shut down as would be allowed in 35 IAC 218.107.

b. The permanent total enclosure installed for the affected coating line shall meet the requirements of permanent total enclosure, which are established in 35 IAC 218, Appendix B, Procedure T. As a result, the capture efficiency of VOM for the affected coating line is assumed to be 100 percent.

c. The permanent total enclosure and the regenerative thermal oxidizer control system shall be operated in a manner consistent with good air pollution control practices.

d. The RTO, in conjunction with the permanent total enclosure, shall be operated to achieve at least 95% overall control (combination of capture and control) of the volatile organic material.

Note: this requirement is more stringent than the control requirements specified by Conditions 1.1.3(b) and 1.1.3(c).

1.1.6 Emission Limitations

a. Emissions from the affected coating line shall not exceed the following limits:

Pollutant	(Ton/Month)	(Ton/Year)
VOM	3.0	20.9

b. i. Emissions of individual hazardous air pollutants (HAPs) from the affected coating

line shall not exceed 1.2 tons/month and 9.9 tons/year.

ii. Emissions of all hazardous air pollutants (HAPs) combined, from the affected coating line, shall not exceed 3.0 tons/month and 20.9 tons/year.

c. Compliance with annual limits in Conditions 1.1.6(a) and 1.1.6(b) shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

1.1.7 Testing Requirements

Upon request from the Illinois EPA or USEPA the Permittee shall conduct tests in accordance with procedures of 35 IAC 218.105(d), (e) and (f) to measure the overall control and performance of the RTO controlling the affected coating line. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing.

1.1.8 Monitoring Requirements

Pursuant to 35 IAC 218.105(d)(2)(A)(ii), the RTO shall be equipped with a USEPA approved continuous monitoring device which is installed, calibrated, maintained, and operated according to vendor specifications at all times the afterburner is in use. This monitoring equipment shall monitor the temperature in the RTO combustion chamber.

1.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected coating line to demonstrate compliance with Conditions 1.1.3, 1.1.5 and 1.1.6:

a. Pursuant to 35 IAC 218.211(e)(2), the Permittee shall collect and record all of the following information each day for the affected coating line and maintain the information at the source for a period of three years:

i. Control device monitoring data;

ii. A log of operating time for the capture system, RTO, monitoring equipment and the associated coating line. If the affected coating line is interlocked to the RTO such

that the affected coating line cannot be operated unless the RTO is operating in compliance with Condition 1.1.5, then logs addressing the inspection and maintenance of this interlock system along with charts indicating when the RTO is in operation, will satisfy the log requirements of this condition; and

iii. A maintenance log for the capture system, RTO and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

b. Coating Solvents:

i. The VOM content of each coating, as applied, in units of lb VOM/gal of coating solids;

ii. Volume of solids applied for each coating per calendar month, in the units of gal solids/month; and

iii. Actual coating VOM consumption per calendar month, in units of lb VOM/month.

c. Clean-up Solvents:

i. The total volume of clean-up solvent dispensed for use on the affected coating line per calendar month, in the units of gal/month;

ii. The VOM content of clean-up solvent used on affected coating line, in lb VOM/gal solvent blend, as determined by supplier;

iii. Total volume of waste solvent generated by affected coating line per calendar month, in the units of gal/month; and

iv. The VOM content of waste solvent generated by affected coating line in lb VOM/gal waste solvent, as determined by disposal company waste profile analyses.

d. HAP percentage in the VOM, determined from monthly production data; and

e. Emissions of VOM, individual HAP, and combination of all HAP (tons/month and tons/year) from the affected coating line with supporting calculations.

1.1.10 Reporting Requirements

The Permittee shall notify the Illinois EPA of deviations of the affected coating line with the permit requirements as follows. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

a. Any record showing violation of 35 IAC 218.207 (See also Condition 1.1.3(b)) within 30 days of such an occurrence [35 IAC 218.211(e)(3)(A)];

b. Any record showing a violation of the emission limitations of Condition 1.1.6 within 30 days of such an occurrence.

1.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

1.1.12 Compliance Procedures

a. Compliance with the particulate matter limitations of Condition 1.1.3(d) is considered to be assured by the inherent nature of the operation of the affected coating line.

b. Compliance with Conditions 1.1.3(b) and 1.1.3(c) is considered to be assured by the control requirements of Conditions 1.1.5(b), 1.1.5(c) and 1.1.5(d).

c. Compliance of the affected coating line with the VOM and HAP emission limitations in Condition 1.1.6 shall be based on the recordkeeping requirements in Condition 1.1.9 and by use of the formulas listed below:

Combined monthly VOM emissions from affected coating lines shall be calculated based on the following equations:

i. Total monthly VOM usage for the affected coating line shall be calculated by use of the following equation:

$$U=\left[\sum_{i=1}^{n}(V_{C(i)} \times C_{(i)})\right] + [(V_S \times S)-(V_W \times W)]$$

Where:

U = Total VOM usage (coating and clean-up solvents) for the calendar month in units of lb/month

C = The VOM content of each coating, as applied, in units of lb VOM/gal solids

V_C= Volume of solids applied for each coating per calendar month in units of gal coating solids/month

S = The VOM content of the clean-up solvent in units of lb VOM/gal of solvent blend

V_S= Total volume of clean-up solvent dispensed for use on the affected coating lines for the calendar month in units of gal/mo

W = The VOM content of waste solvent generated by the affected coating line in units of lb VOM/gal as measured in accordance with Condition 1.1.9(c)(iv)

V_W= Total volume of waste solvent generated by the affected coating line for the calendar month in units of gal/mo

ii. Total monthly VOM emissions for the affected coating line shall be calculated by use of the following equation:

E = U x (1-F)

Where:

E = Total VOM emissions per calendar month in units of lb VOM/mo

U = Total VOM consumption per calendar month in units of lb VOM/mo

F = Fraction, by weight, of VOM emissions from the surface coating reduced or prevented from being emitted to the ambient air. This fraction is the overall efficiency of the capture system and control device, and is equal to the destruction efficiency of the RTO controlling the affected coating line, as measured in the most recent stack test.

iii. Total monthly HAP emissions for the affected coating line shall be calculated by use of the following equation:

$E_h = U \times C_h \times (1-F)$

where:

E_h = HAP emissions (lbs/mo)

U = Total VOM consumption per calendar month in units of lb VOM/mo

C_h = HAP percentage in the VOM, determined from monthly production data

F = Fraction, by weight, of VOM emissions from the surface coating reduced or prevented from being emitted to the ambient air. This fraction is the overall efficiency of the capture system and control device, and is equal to the destruction efficiency of the RTO controlling the affected coating line, as measured in the most recent stack test.

d. Compliance with the overall control efficiency requirement under Condition 1.1.3(b) and (c) shall be based on the latest measurement of destruction efficiency of the RTO controlling the affected coating line, and the latest verification test of the permanent total enclosure.

2. The affected coating line may be operated under this construction permit until renewal of the CAAPP permit or a modification of the CAAPP permit has been issued provided a timely application is submitted to amend the CAAPP permit to incorporate the affected coating line.

If you have any questions on this, please call Jason Schnepp at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JMS:psj

cc: Region 1

Attachment 1

Nonattainment NSR Applicability - VOM Netting Analysis

Contemporaneous Time Period of 1998 Through 2002

Table I – Emissions Increases and Decreases Associated With The Proposed Modification

Item of Equipment	Past Actual (Tons/Yr)	Future Potential (Tons/Yr)	Emissions Increase (Tons/Year)
Coating Line #10	0.00	20.90	20.90

Table II – Source-Wide Creditable Contemporaneous Emission Increases

Item of Equipment	Emissions Increase (Tons/Year)	Permit Number	Date
Press Line 9	15.00	02040076	6/02
Planeta	24.30	99070022	12/99
Line 11	10.64	99070022	12/99
Lab Coater	0.31	99070022	12/99
Total:	50.25		

Table III – Source-Wide Creditable Contemporaneous Emission Decreases

Item of Equipment	Commencement of Operational Change Date	Emissions Decrease (Tons/Year)	Permit Number
Line 3	12/99	33.00	99070022
Line 4	12/99	30.80	99070022
	Total:	63.80	

Table IV – Net Emissions Change

	(Tons/Year)
Increases and Decreases Associated With The Proposed Modification	20.90
Creditable Contemporaneous Emission Increases	50.25
Creditable Contemporaneous Emission Decreases	63.80
	7.35

JMS:psj

PROJECT SUMMARY

I. INTRODUCTION

An application has been voluntarily submitted by United States Can Company to construct one new can coating line controlled by the source's existing regenerative thermal oxidizer. The construction permit will have federally enforceable limitations on the emission unit. These limits would prevent the facility from triggering 35 IAC 203: Major Stationary Sources Construction and Modification (MSSCAM). The proposed limits would be accompanied by recordkeeping and reporting requirements.

II. SOURCE DESCRIPTION

United States Can Company is located in Elgin, Illinois, Cook county. Cook county is designated as attainment for all pollutants except ozone, which is designated as severe nonattainment. The construction permit application includes one new coating line. The permit has limitations on the volatile organic material emissions from the new coating line as well as control requirements for the existing regenerative thermal oxidizer. These limits are required to ensure that the net emissions increase for this project as well as all other projects since 1998 will not exceed 25 tons per year for volatile organic material.

III. EMISSIONS

Emissions limits from this project will be established to ensure that a major modification does not occur.

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois. The Board has standards for sources of volatile organic material. This site readily complies with all applicable Board standards.

V. PROPOSED PERMIT

The conditions of the proposed permit contain limitations and requirements to assure that this facility will not trigger the requirements of 35 IAC Part 203: Major Stationary Sources Construction and Modification (MSSCAM). The permit sets limitations on volatile organic material emissions. The permit conditions also establish control requirements and appropriate compliance procedures, including recordkeeping requirements and reporting requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the facility is operating within the limitations set by the permit and are properly controlling emissions.

VI. **REQUEST FOR COMMENTS**

It is the Illinois EPA's preliminary determination that the facility meets all applicable state and federal air pollution control requirements, subject to the conditions proposed in the draft permit. The Illinois EPA is therefore proposing to issue a permit with federally enforceable limits for this construction project.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

JMS:02100030:psj